



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,963	10/19/2005	Makoto Ashiura	21713-00055-US1	9985
30678 7590 12/18/2008 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20006				
EXAMINER				
LET, RIP A				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
12/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,963

Applicant(s)

ASHIURA ET AL.

Examiner

RIP A. LEE

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1796

DETAILED ACTION

This office action follows a response filed on October 22, 2008. Claims 1, 7, and 8 were amended to correct matters of form. Claims 1-3 and 6-14 are pending.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 6, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoxmeier (U.S. 5,270,394) in view of Lakshmanan (U.S. 3,923,722) for the same reasons set forth in paragraph 4 of the previous office action dated April 22, 2008.
3. Claims 1, 2, 6, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoxmeier (U.S. 5,270,394) in view of Majumdar *et al.* (U.S. 6,186,202) for the same reasons set forth in paragraph 5 of the previous office action dated April 22, 2008.
4. Claims 1-3 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoxmeier (U.S. 5,270,394) in view of Nakajima *et al.* (JP 59-12948) for the same reasons set forth in paragraph 6 of the previous office action dated April 22, 2008.

Response to Arguments

5. Applicant traverses the rejection of claims over Hoxmeier in view of Lakshmanan, indicating that Hoxmeier does not teach the use (apparently in combination with silica or carbon black for making a tire tread) of the resultant coupled polymer. Using this viewpoint, Applicant argues that the prior art of Lakshmanan relates to adhesive formulations (rather than tire treads) and does not disclose modified, fullerene containing polymer.

Art Unit: 1796

Applicant traverses the rejection of claims over Hoxmeier in view of Majumdar *et al.*, arguing that the secondary reference relates to adhesive formulations and does not disclose modified, fullerene containing polymer.

Applicant traverses the rejection of claims over Hoxmeier in view of Nakajima *et al.*, pointing to the fact that the secondary reference teaches sponge rubber which would be unsuitable for use as a tire tread.

Applicant's arguments have been considered fully, but they are not persuasive. Instant composition claims have been presented in product-by-process format, and the process by which the composition was made has been considered and addressed in Hoxmeier. Applicant does not traverse the fact that the polymer of Hoxmeier possesses features that meet all limitations pertaining to the modified, fullerene containing polymer described in the instant claims.

Both Lakshmanan and Majumdar *et al.* were relied upon to fill an obvious missing element of filler. Hoxmeier, indeed discloses use of inventive polymers in adhesive formulations (although it is not Applicant's specific use), and secondary references pertain to role of filler in adhesives. The person of ordinary would have found it obvious to include filler in an adhesive formulation to adjust the viscosity of the adhesive and as a means to dissipate heat during flexing. Applicant has not shown why such a combination is not an obvious one and why the person of ordinary skill in the art would not have found it obvious to include filler disclosed in the prior art in the adhesive formulations containing Hoxmeier's polymers.

Nakajima *et al.* was relied upon to fill an obvious missing element of vulcanization agent. Hoxmeier, indeed discloses use of inventive polymers for molding applications (although it is not Applicant's specific use), and secondary references pertain to role of vulcanization agent for making useful molding compositions based on conjugated diene polymer. The person of ordinary would have found it obvious to carry out vulcanization in the presence of conventional materials disclosed in Nakajima *et al.* in order to improve the mechanical properties of the diene-based polymer. Applicant has not shown why the skilled artisan would not appreciate vulcanization of the diene-based polymer of Hoxmeier and why the person of ordinary skill in the art would not have found it obvious to use vulcanization agents disclosed in the prior art.

In light of these considerations, the three rejections of record have been maintained.

Art Unit: 1796

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1796

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu S. Jagannathan, can be reached at (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Rip A. Lee/
Art Unit 1796

December 15, 2008

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796